



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/500,121

06/25/2004

Seiichiro Udagawa

4724-0019WOUS

7905

35301 7590 11/03/2008  
MCCORMICK, PAULDING & HUBER LLP  
CITY PLACE II  
185 ASYLUM STREET  
HARTFORD, CT 06103

EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

11/03/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,121	<b>Applicant(s)</b> UDAGAWA, SEIICHIRO	
	<b>Examiner</b> LEONARD J. WEINSTEIN	<b>Art Unit</b> 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/31/08; 09/25/08</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to the amendment of September 25, 2008. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

2. The examiner acknowledges the amendment made to claim 6.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Upon further consideration of the method of claim 5 new issues have been brought to light that necessitate the following rejection under 35 U.S.C. 112, second paragraph. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the limitation of "performing a sucking operation... performing a discharge operation... performing a sucking operation... performing a discharging operation...." The limitations do not recite a limitation that distinguishes the first instances of "a sucking operation" and "a discharge operation" from the second instances of those operations. Although the applicant has claimed the operations in the order in which instant invention would carry them out, each operation after the "first" sucking operation depends from the previous operation. To clearly state a claim commensurate in scope with the disclosure each operation should have signal before it such as "a first sucking operation... a first discharge operation... a second sucking operation... a second discharge operation...." This would

Art Unit: 3746

clearly identify the separate and distinct steps of the method that the applicant is attempting to claim. It is further noted that the second instances of "sucking" and "discharge operations" are distinct from the first instances due to the inclusion of the function of the deaeration valve.

5. Claim 5 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are constituted by the omission of any language setting forth the proper dependency of each operation from the operation which precedes it. As claimed each and every "sucking" or "discharge" operation can be interpreted on its own and an apparatus would only have to be able to do each operation independent of any other operation to satisfy the claim. However as discussed in the prior office action the specification teaches on page 16 [¶0060] a first process wherein sucking operation as shown in figure 2A and a discharging operation as shown in figure 2B, are preformed before the second instance of a sucking operation as claimed (second process as disclosed on page 17 [¶ 0062] as shown in figure 10A). None of the steps claimed are properly dependent on any previous step such that the method claimed is not supported by disclosure.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Yajima US 6,539,986.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In the embodiment of figure 2, Yajima teaches all the limitations as claimed for a chemical supply apparatus a pump 1 discharging a liquid by communicating with the liquid accommodated in a liquid tank 6 through a liquid introduction flow path 7 to which a pump inlet-side valve 8 for opening/closing the flow path is provided, a filter 17 connected to said pump 1 through a pump outlet flow path, as defined by the line connecting element 15 and element 17, provided with a pump discharge-side valve 15 and opened/closed by said pump discharge-side valve 15, and a liquid dispense portion

Art Unit: 3746

13 connected to said filter 17 through a liquid discharge flow path 14 provided with a discharge valve 16 and opened/closed by said discharge valve 16, and dispensing the liquid in said liquid tank from said liquid dispense portion 13, the apparatus then performing the deaerating method comprising the steps of: performing a sucking operation of said pump 1 under such a state that said pump-inlet side valve 8 is opened and that said pump discharge-side valve 15 is closed, as defined by  $S_1$ , performing a discharging operation of said pump 1 under such a state that said pump-inlet side valve 8 and said discharge valve 16 are closed and that said pump discharge-side valve 15 is opened, performing the operation, as depicted in figure 6, of said pump 1 under such a state that a deaeration valve 9 provided to an exhaust flow path 10 communicating with an inlet side (left side in communication with element 15) of said filter 17, said pump inlet-side valve 15, and said discharge valve 16 are closed and that said pump discharge-side valve 15 is opened, as shown by the time graph in figure 6 where the valves as discussed are found to be in the condition that is claimed during the time between segments  $S_1$  and  $S_2$  during operation, and performing an operation of said pump 1 under such a state that said deaeration valve 9 and said pump discharge-side valve 15 are opened and said pump inlet-side valve 8 and said discharge valve 16 are closed, as shown by time graph in figure 6 with the operational states of each the valves as discussed during the  $S_1$  time segment of operation.

In the embodiment of figure 2, Yajima teaches all the limitations as claimed for a chemical supply apparatus including: a pump discharging 1 a liquid by communicating with the liquid accommodated in a liquid tank 6 through a liquid introduction flow path 7

Art Unit: 3746

to which a pump inlet-side valve 8 for opening/closing the flow path 7 is provided, a filter 17 connected to said pump 1 through a pump outlet flow path, as shown in figure 2 with the path connecting element 15 and 17, provided with a pump discharge-side valve 15 and opened/closed by said pump discharge-side valve 15, a liquid dispense portion 13 connected to said filter 17 through a liquid discharge flow path 14 provided with a discharge valve 16, the liquid in said liquid tank 6 being dispensed from said liquid dispense portion 13, an exhaust flow path 10 provided in communication with an inlet side (side of element 17 connected to element 15 via path as discussed) of said filter 17, and a deaeration valve 9 provided to said exhaust flow path 10, a system control section, the system of figure 1, configured close said deaeration valve deaeration valve 9, said pump inlet-side valve 8, and said discharge valve 16 and to open said pump discharge-side valve 15 while performing a sucking operation of said pump, and configured to open said deaeration valve 9 and said pump discharge-side valve 15 and to close said pump inlet-side valve 8 and said discharge valve 16 while performing a discharge operation of said pump 1.

### ***Response to Arguments***

8. Applicant's arguments filed September 25, 2008 have been fully considered but they are not persuasive. With respect to the rejection of claims 5 and 6 as being anticipated by Yajima US 6,539,986 under 35 U.S.C. 102(e), the applicant argues that Yajima does not teach the steps of the method as claimed. Specifically the applicant argues that Yajima teaches, in figure 6, that "during the time between segments S1 and S2 of operation, each of an inflow side valve 8, a pressure regulating valve 9, a

Art Unit: 3746

discharge side valve 15, and a nozzle opening/closing valve is closed[.]” and “during the time segment S1 of the operation, each of an inflow side valve 8, a discharge side valve 15 and, and a nozzle opening/closing valve 16 is closed while a pressure regulating valve 9 is open.” The examiner agrees that Yajima does teach both of these operational states during the time segments identified in figure 5 of the disclosure. The examiner cited figure, which applicant appears to acknowledge, however it has been mischaracterized by the applicant. In short in both the times segments identified by the examiner, segment between S1 and S2 and the segment of time designated as S1, discharge side valve is open. The operational states of the other valves are in accordance with the limitations claimed as discussed above and are anticipated by Yajima.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/  
Supervisory Patent Examiner, Art  
Unit 3746

/Leonard J Weinstein/  
Examiner, Art Unit 3746